

WHAT IS CLAIMED IS

1 1 A method for converting a computer program into an executable
2 object having symbol references that can be redirected at run-time, the method executing
3 on a computer system, the computer system including a processor and storage device, the
4 computer system further including a computer program having symbolic references to
5 original definitions having original names, the method comprising the steps of:

6 identifying one or more of the original names;

7 renaming one or more original names used in the computer program with
8 new names; and

9 creating an association between the original names and the new names so
10 that symbolic references to the original names invoke a reference to the new names.

1 2. The method of claim 1, further comprising the step of
2 storing information about the associations in a table format.

1 3. The method of claim 2, further comprising the steps of
2 causing a symbolic reference to reference an entry in the table; and
3 associating a pointer to an original definition with the entry.

1 4. The method of claim 1, wherein a compiler is used to compile the
2 computer program, the method further comprising the step of
3 using information generated by the compiler to perform the step of
4 identifying original names in the computer program.

1 5. The method of claim 1, wherein a symbolic reference is to a data
2 structure.

1 6. The method of claim 1, wherein a symbolic reference is to a
2 program instruction.

1 7. The method of claim 1, wherein a symbolic reference is to a
2 resource.

1 8. The method of claim 1, wherein a symbolic reference is to an
2 object.

1 9. The method of claim 1, wherein the Microsoft Developer's
2 Environment is used to compile the computer program, wherein the Microsoft
3 Developer's Environment includes utilites for generating information about symbolic
4 references in the computer program, the method further comprising the steps of
5 using information from one or more files to generate one or more auxiliary
6 files that include information on original names; and
7 using the auxiliary file to compile an add-on module for execution in
8 conjunction with the computer program.

1 10. The method of claim 1, wherein the Microsoft Developer's
2 Environment provides for compiling the computer program by using a linker that
3 generates a .map file, the method further comprising
4 wherein the step of using information from one or more files to generate
5 an auxiliary file includes the substep of using the .map file to derive a .def file that is
6 included as at least a portion of the auxiliary file.

1 11. A method for providing run-time modification of functionality in a
2 computer program that has a substitute reference for one or more symbolic references
3 used in the computer program, the method executing on a computer system, the computer
4 system including a processor and storage device, the method including the steps of:
5 loading the computer program into the computer system;
6 loading a module that includes an item definiton into the computer system;
7 and
8 executing a process to associate the substitute reference with the item
9 definition.

1 12. The method of claim 11, wherein the method further comprises the
2 steps of:
3 associating the substitute reference with the item definition by executing
4 script language instructions.

1 13. The method of claim 11, wherein the method further comprises the
2 steps of:

- 3 associating the substitute reference with the item definition during
- 4 execution of the computer program by concurrently executing script language instructions
- 5 to control the associations.